

In the Claims:

1. (Presently amended) A MHC class II antigenic peptide comprising
 - (a) the amino acid sequence of the peptide binding motif selected from the group consisting of SEQ ID NOs. 49 to 57 and SEQ ID NOs. 103 to 122, or
 - (b) the amino acid sequence of the peptide binding motif selected from the group consisting of SEQ ID NOs. 49 to 57 and SEQ ID NOs. 103 to 122, with additional N-and C-terminal flanking sequences of a corresponding sequence selected from the group consisting of SEQ ID NOs. 1 to 39 and SEQ ID NOs. 58 to 102.
2. (Presently amended) A MHC class II antigenic peptide comprising
 - (a) the amino acid sequence of the peptide binding motif of SEQ ID NO. 49, or
 - (b) the amino acid sequence of the peptide binding motif of SEQ ID NO. 49 with additional N-and C-terminal flanking sequences of a corresponding sequence selected from the group consisting of SEQ ID NOs. 1 to 3.
3. (Presently amended) A MHC class II antigenic peptide comprising
 - (a) the amino acid sequence of the peptide binding motif of SEQ ID NO. 103, or
 - (b) the amino acid sequence of the peptide binding motif of SEQ ID NO. 103 with additional N-and C-terminal flanking sequences of the corresponding sequence of SEQ ID NOs. 58 and 59.
4. (Presently amended) A MHC class II antigenic peptide comprising
 - (a) the amino acid sequence of the peptide binding motif of SEQ ID NO. 104, or
 - (b) the amino acid sequence of the peptide binding motif of SEQ ID NO. 104 with additional N-and C-terminal flanking sequences of the corresponding sequence of SEQ ID NO. 60.
5. (Presently amended) A MHC class II antigenic peptide comprising
 - (a) the amino acid sequence of the peptide binding motif of SEQ ID NO.105, or

(b) the amino acid sequence of the peptide binding motif of SEQ ID NO. 105 with additional N-and C-terminal flanking sequences of the corresponding sequence of SEQ ID NO. 61.

6. (Presently amended) A MHC class II antigenic peptide comprising

(a) the amino acid sequence of the peptide binding motif of SEQ ID NO. 106,
or

(b) at least the amino acid sequence of the peptide binding motif of SEQ ID NO. 106 with additional N-and C-terminal flanking sequences of the corresponding sequence of SEQ ID NO. 62.

7. (Presently amended) A MHC class II antigenic peptide comprising

(a) the amino acid sequence of the peptide binding motif of SEQ ID NO. 107, or

(b) the amino acid sequence of the peptide binding motif of SEQ ID NO. 107 with additional N-and C-terminal flanking sequences of the corresponding sequence of SEQ ID NO. 63.

8. (Presently amended) A MHC class II antigenic peptide comprising

(a) the amino acid sequence of the peptide binding motif of SEQ ID NO. 50, or

(b) the amino acid sequence of the peptide binding motif of SEQ ID NO. 50 with additional N-and C-terminal flanking sequences of the corresponding sequence of SEQ ID NO. 5.

9. (Presently amended) A MHC class II antigenic peptide comprising

(a) the amino acid sequence of the peptide binding motif of SEQ ID NO. 108, or

(b) the amino acid sequence of the peptide binding motif of SEQ ID NO. 108 with additional N-and C-terminal flanking sequences of the corresponding sequence of SEQ ID NOs. 64 to 67.

10. (Presently amended) A MHC class II antigenic peptide comprising

- (a) the amino acid sequence of the peptide binding motif of SEQ ID NO. 109, or
- (b) the amino acid sequence of the peptide binding motif of SEQ ID NO. 109 with additional N-and C-terminal flanking sequences of the corresponding sequence of SEQ ID NO. 68.

11. (Presently amended) A MHC class II antigenic peptide comprising

- (a) the amino acid sequence of the peptide binding motif of SEQ ID NO. 110, or
- (b) the amino acid sequence of the peptide binding motif of SEQ ID NO. 110 with additional N-and C-terminal flanking sequences of the corresponding sequence of SEQ ID NOs. 69 and 70.

12. (Presently amended) A MHC class II antigenic peptide comprising

- (a) the amino acid sequence of the peptide binding motif of SEQ ID NO. 111, or
- (b) the amino acid sequence of the peptide binding motif of SEQ ID NO. 111 with additional N-and C-terminal flanking sequences of the corresponding sequence of SEQ ID NO. 72.

13. (Presently amended) A MHC class II antigenic peptide comprising

- (a) the amino acid sequence of the peptide binding motif of SEQ ID NO. 112, or
- (b) the amino acid sequence of the peptide binding motif of SEQ ID NO. 112 with additional N-and C-terminal flanking sequences of the corresponding sequence of SEQ ID NO. 73.

14. (Presently amended) The MHC class II antigenic peptide of claim 1 linked to a MHC class II molecule.

15. (Presently amended) A purified antibody composition which is selectively reactive to a MHC class II antigenic peptide according to claim 1.

16. (Presently amended) A nucleic acid molecule encoding a peptide according to claim 1.

17. (Original) A recombinant nucleic acid construct comprising the nucleic acid molecule according to claim 16 operably linked to an expression vector.

18. (Presently amended) A host cell containing the nucleic acid construct according to claim 17.

19-22. (Canceled).

23. (Presently amended) A pharmaceutical composition comprising a MHC class II antigenic peptide according to claim 1 and a pharmaceutically acceptable carrier.

24. (Canceled).

25. (Presently amended) A method for diagnosing RA comprising detecting in a patient serum sample the presence of one or more peptides according to claim 1.

26. (Canceled).

27. (Canceled).

28. (Presently amended) A method for diagnosing RA comprising detecting in a patient serum sample the presence of one or more peptides selected from the group consisting of SEQ ID NOs 40 to 48 and SEQ. ID NOs 123 to 141.

29. (Canceled).

30. (New) A pharmaceutical composition comprising a peptide selected from the group consisting of SEQ ID NOs 40 to 48 and SEQ ID NOs. 123 to 141, and a pharmaceutically acceptable carrier.

31. (New) A pharmaceutical composition comprising an antibody according to claim 15 and a pharmaceutically acceptable carrier.